



U. of
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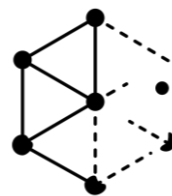
香港中文大學

Chinese U. of
Hong Kong



NTNU

Norwegian U. of
Science and Technology



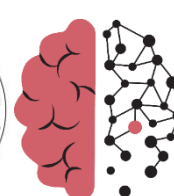
K.G. Jebsen Centre for
Alzheimer's Disease



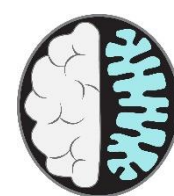
Kavli Institute for
Systems Neuroscience



NO-Age



NO-AD



MIT-AD

The NO-Age and NO-AD Seminar Series # 85

‘Ferroptosis and Neurodegeneration’

by

Prof. Lei Peng

State Key Laboratory of Biotherapy, Sichuan University, China

at

11:15-12:15 (CET), Thursday, 08th Oct. 2026

Location: Seminarrom room S104.016, Ahus

Online: <https://uio.zoom.us/j/63533453651>

Evandro F. Fang (UiO), Jon Storm-Mathisen (UiO), Asgeir Kibro-Flatmoen (NTNU), Lene Juel Rasmussen (KU),
W.Y. Chan (CUHK)

Queries: e.f.fang@medisin.uio.no

Previous recorded talks are available here: <https://noad100.com/videos-previous-events/>



Speaker: Prof. Lei Peng

Title: Ferroptosis and Neurodegeneration

Abstract:

Ferroptosis is a regulatory form of cell death driven by iron-dependent lipid peroxidation, which has been implicated in neurodegeneration. The brain is enriched in polyunsaturated fatty acids (PUFAs) and iron, which makes it particularly susceptible to lipid peroxidation, leading to ferroptosis. In neurodegenerative diseases such as Alzheimer's disease (AD) and vascular cognitive impairment, such mechanisms were dysregulated and contributed to neuronal loss. For example, In the last couple of years of research, we have identified several key proteins, such as APP, tau, ApoE4, and PS1/2, in the neuronal death caused by ferroptosis, and recent evidence has indicated the importance of ferroptosis in AD. On the other hand, we identified crucial ferroptotic genes that can be involved in vascular cognitive impairment, Parkinson's disease, and MS. These observations may be translated into therapeutics.

Biography:

Dr. Peng Lei is a Professor at the State Key Laboratory of Biotherapy, West China Hospital, Sichuan University, China. He received his Ph.D. from the University of Melbourne in 2012 (with Chancellors Award), and did his post-doc training at the Florey Institute of Neuroscience and Mental Health before returning to Sichuan. Dr. Lei has authored 100+ publications (12000+ citations), including key author publications in Nature Medicine, Nature Reviews Neuroscience, Nature Biomed Engineering, and Molecular Psychiatry. He discovered the involvement of tau protein in metal homeostasis and its implications in neurological disorders, and currently focuses on the physiological functions of tau and the consequences of loss-of-function, such as cell death induction, in brain disorders such as Alzheimer's disease and ischemic stroke. Dr. Lei has received several prestigious fellowships and competitive funding locally and internationally, and serves on the editorial board of several academic journals.

Name: **Prof. Lei Peng**

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